

## ABORIGINAL STONE ARTIFACTS FROM THE MURRAY RIVER REGION BETWEEN MILDURA AND RENMARK, AUSTRALIA

By D. A. CASEY

Honorary Associate, National Museum of Victoria

A large number of Aboriginal stone artifacts from the planned water storage area of the Chowilla Dam and the adjacent country in Victoria and New South Wales was collected during field investigations carried out by the National Museum of Victoria.

This assemblage of artifacts includes flake and core implements unifacially chipped and trimmed, core stones, hammerstones, millstones, mortars and pounding stones. It includes also elliptical artifacts and large ovoid artifacts, both of hitherto unrecorded types and of unknown use.

### Classified Artifacts

Amongst these the recognizable types and categories are:

1. *Adze stones* (39 examples). Most are made from irregular pieces of stone and only a few from recognizable flakes. Only two show any similarity to the distinctive *tula* adze flake, and this similarity may well be fortuitous. Many are worn down to the 'slug' shape with pointed ends and step flaking on both margins. They range in width from about 20 to 40 mm. Their average width is 32 mm. Several are highly patinated.

2. *Side scrapers* (2). Discoidal and other types of scrapers are absent.

3. *Flakes and fragments with some secondary trimming* (15). Some may possibly have been intended to be scrapers.

4. *Utilized flakes* (4). Untrimmed flakes with slight chipping of the edge, which may have been the result of use for cutting or scraping.

5. *Highbacked elongate uniface implements* (5). Fig. 1. One is a broken fragment only, and one has an end broken off. Four are of quartzite and one is of sandstone, a material

not usually used for flaked implements. They range in length from 9 to 13 cm, and all are about 5 cm wide.

All are similar morphologically, but there are not sufficient examples to claim that they constitute a definite type.

6. *Uniface choppers* (4). Crudely flaked core implements.

7. *Cores*. (a) Horse-hoof cores, of the typical more or less conical shape (7). These examples do not appear to have been used as choppers. (b) Other cores, with one striking platform only (8). (c) Irregular cores, with several striking platforms (12).

8. *Cores or choppers* (11). Crude artifacts that cannot be ascribed definitely to either of these categories.

9. *Hammerstones* (6). As in most assemblages of Australian stone artifacts recognizable hammerstones are few in number.

10. *Millstones*. (a) Lower millstones or fragments of them (9), (b) Upper millstones or fragments of them (16). See also item 14.

11. *Mortars*, with saucer-shaped hollows (15). Four have hollows on both sides. Four have pits or 'anvil' holes, formed by percussion, on the side opposite to the saucer-shaped hollow.

12. *Pestles or pounding stones* (11). All are of the elongate sort, with a pounding surface at one end. This surface is curved, in one direction, presumably as a result of use with a rocking motion. Three of them may have been used also as hammerstones. No examples of the round drum-shaped *kulki* percussion stones were found.

13. *Elliptical artifacts* (3). Artifacts of this type have not hitherto been described. They are approximately elliptical in outline (Pl. 29, fig.

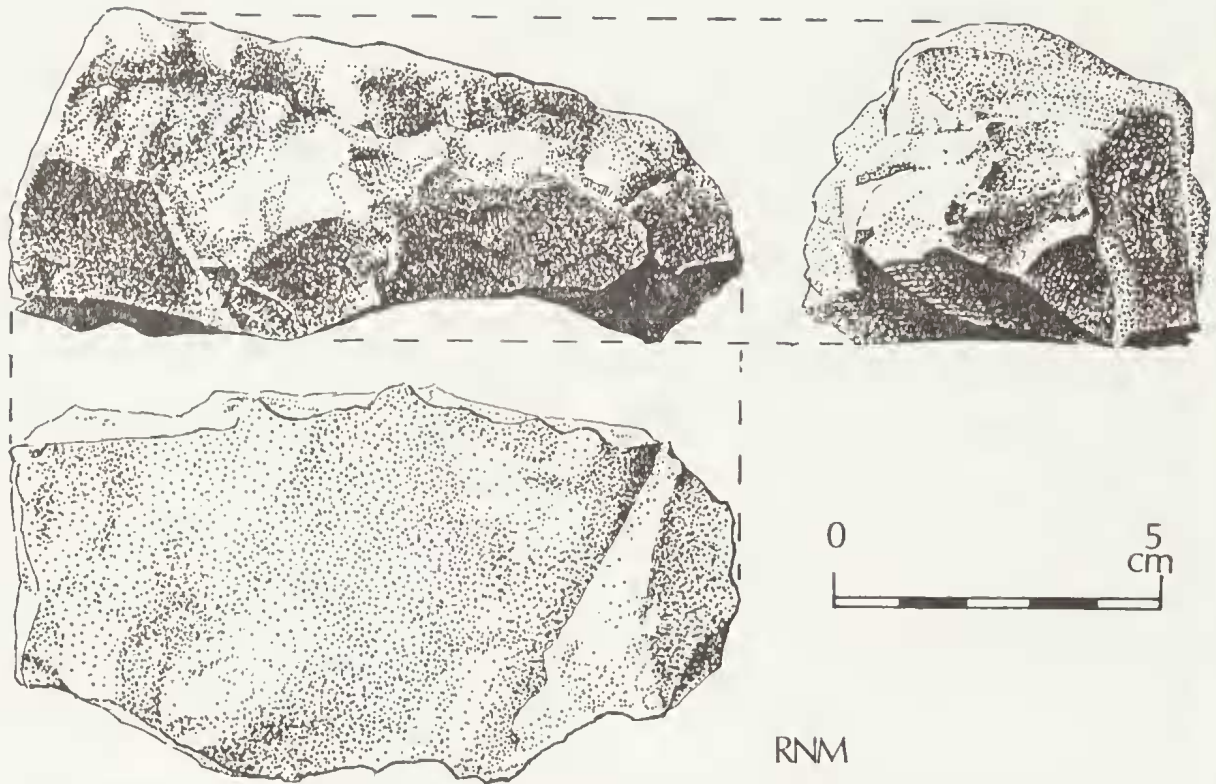


Fig. 1—Highbacked elongate flaked implement, Talgarry Station, Lake Victoria, N.S.W.  
X76033, reg. no. N.M.V.

1, fig. 2e). Their thickness is small compared to their length or breadth. One or both sides are convex. These examples are 33, 24, and 16.5 cm long. There is one other example only in the National Museum of Victoria, from Langawirra, near Mootwingee, N.S.W. It is 16.5 cm long. In one of them the degree of convexity is approximately the same on both sides. In two it is greater on one side than the other, and in the other, one side is approximately flat. They are not axe-like and have no cutting edge. On all of them the periphery is slightly rounded. All are made from coarse grained ferruginous sandstone. Their surface is markedly rough, and it is not clear whether they have been shaped by hammer dressing or by grinding. The smooth curves of their convex surfaces, however, seem to indicate that they were ground to shape.

Their function is not known. From their form it might be supposed that they are some sort of upper millstone, one or both sides of

which have been worn down by use. But there is no real evidence to confirm this, and the coarse grained material from which they are made is not known to have been used for millstones.

It is proposed that this type of artifact be known by the designation here used.

14. *Emu-egg stones* (3). Large ovoid quartzite pebbles about the size and shape of emu eggs (Pl. 29, figs. 2, 3. Fig. 2a, b). In the National Museum of Victoria there are 57 other examples, all from along the Darling River from about Wilcannia to about Poonearrie and up to about 50 miles E. of the river in the vicinity of Menindee. (Of the 57 examples, 45 are from the Lindsay Black collection of Aboriginal artifacts). These artifacts range in length from about 12 to 18 cm. Many have been hammer dressed over some or the greater part of their surface, presumably to improve their symmetry. Many are beautifully symmetrical. Virtually all have a flat surface, in the middle

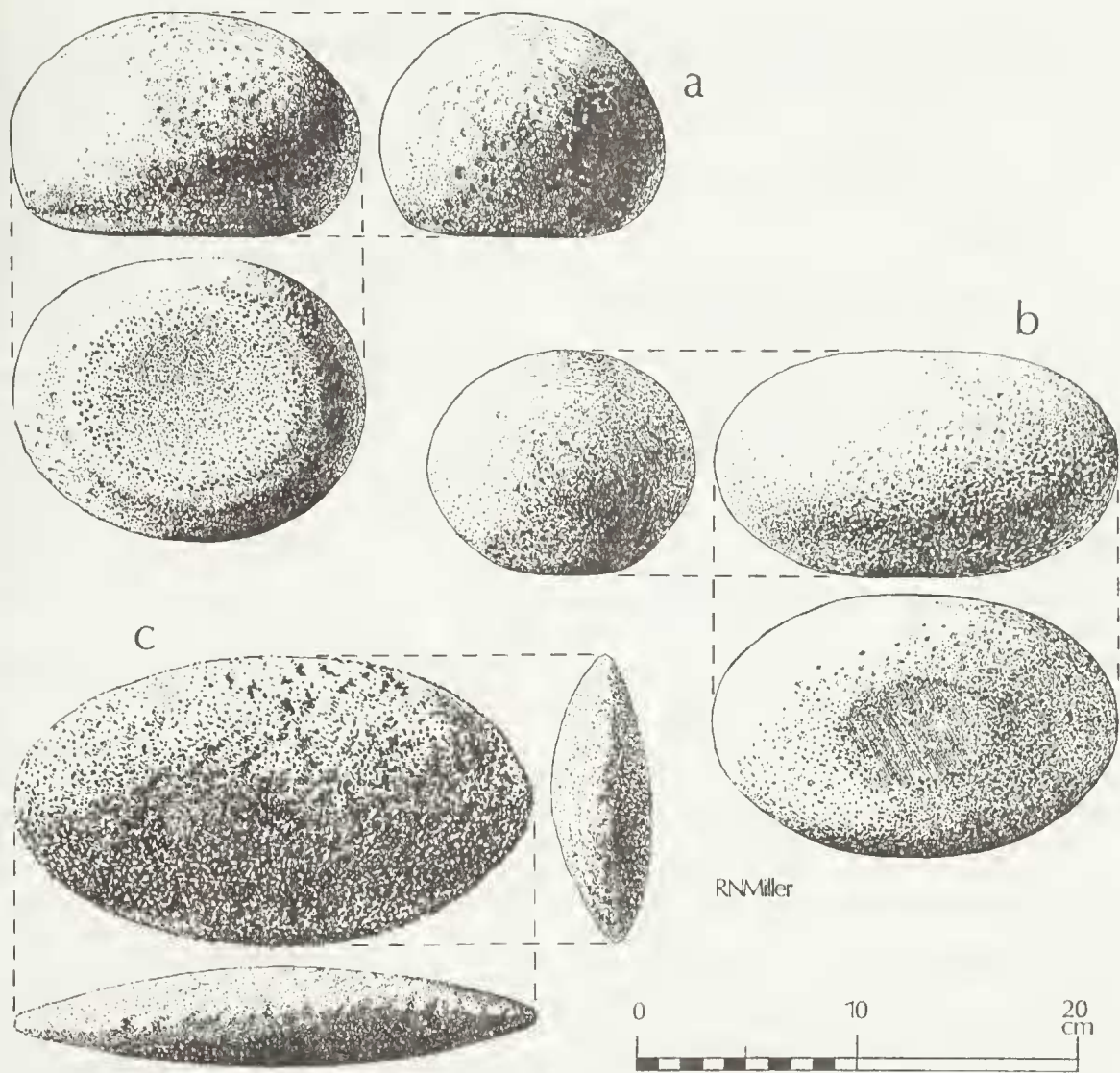


Fig. 2a—Emu-egg stone, Talgarry Station, Lake Victoria, N.S.W. X76033.  
 Fig. 2b—Emu-egg stone, Albermarle Station, E. of Menindee, N.S.W. X73995.  
 Fig. 2c—Elliptical artifact, Talgarry Station, Lake Victoria, N.S.W. X76034.

of their longest dimension, on which they could lie without rolling. On most, if not all, of them this is a naturally flat portion of the pebble. On a few examples the flat seems to have been formed or made more regular by grinding, but at least part of the flat surface on many is the natural cortex of the pebble unmodified by hammer dressing or grinding. The flats range in size from about an eighth of the length of the pebble or less, to about three quarters of

it. Two or three of the examples from the Lindsay Black collection have no flat at all.

Their function is not known. They do not appear to be implements, and they are perhaps ritual or ceremonial objects. At first sight those with large flat surfaces look as if they were some sort of upper millstone, but none are at all considerably worn down by grinding, and their use for this purpose is thus very improbable.

A few artifacts of approximately the same size as the emu-egg stones, and with similar flat surfaces, but not ovoid in shape, were collected on Talgarry and Nulla Stations, near Lake Victoria. Several of these are of sandstone. They are presumably a massive variety of upper millstone and have been here included in that category.

These artifacts have not been previously described. They are referred to as Emu-egg like stones by Lindsay Black in a manuscript catalogue of his collection. It is proposed that they should be known as Emu-egg stones.

On Flinders Island in Bass Strait, ovoid waterworn granite pebbles have been found in some numbers on Aboriginal camp sites, and elsewhere in the interior of the N. part of the island. Associated with them are mortars with saucer-shaped hollows, pestles and pounding stones, anvil stones, horse-hoof cores, and crude flake artifacts without secondary trimming (Mackay 1946).

The granite pebbles occur naturally only on the sea beaches, and all those found inland must have been taken there by Aboriginals. These range in length from about 12-30 cm. They are notably regular in their ovoid elliptical shape, and they seem to have been selected for this reason. The mortars are made from granite pebbles, but except for these, none of the pebbles has been ground or modified in shape in any way by man. Their function is not known, but they have been found in sufficient numbers to indicate that they served some particular purpose other than that of providing material for the making of mortars.

Flinders Island was, very probably, not occupied by Aboriginals when it first became known to Europeans. The period of Aboriginal occupation is not known. The assemblage of artifacts is typologically not very different from that of the Chowilla area, and although the granite pebbles do not have a flat area anywhere on their surface, they may perhaps be considered as being equivalent to the Emu-egg stones, but this is of course in no way certain.

#### Unclassified Specimens

As well as the recognizable types and cate-

gories of artifacts, a large number of flakes and fragments of stone were collected from many sites within the area. These are of little significance except as evidence of the presence of Aborigines, and as an indication of the various sorts of stone that were used by them. No hard rocks outcrop in the area and therefore all of the material for their stone artifacts must have been brought by the Aborigines from elsewhere. The various sorts of stone used and their probable places of origin are discussed by E. D. Gill in this Memoir.

At two sites, Lindsay Island and E. of the homestead on Berribee Station, fairly large numbers of notably small stone flakes were collected. These are not small blade flakes such as those used in the making of microliths. Accumulations of small flakes are often taken to indicate a scarcity of good stone material and to be the result of every piece having been utilized to the fullest possible extent. However, in this case, it is difficult to understand why large numbers of small flakes should have been found in two localities only.

Nearly all the artifacts collected were found on or near the surface of the ground, so it cannot be assumed that the various types of artifacts were contemporaneous or even that individual examples of them are all of the same age.

#### Antiquity

It is known from the C14 dates obtained from human bones, and from charcoal associated with middens, that Aboriginals were present in this area up to at least 18,000 years ago (E. D. Gill, this Memoir). It is not possible to say, however, whether any of the artifacts collected do in fact date from this time. Simple uniface flake and core implements existed at a very early period, but they persisted also until recent times. Horse-hoof cores were a very early type but their latest date has not been established. Adze stones were in use at Tartanga on the Murray River in South Australia 6,000 years ago, but they were also in use in central Australia in European times. Nothing is known of the possible age of the Elliptical artifacts. The only artifacts of this assemblage

that can be said, with some certainty, to be not quite recent are the Emu-egg stones. These are hammer dressed, and this technique, although it is probably not very ancient, was nowhere in use in Australia in European times. It was associated almost entirely with ground edge implements and it is generally considered that these, with the exception of some found near Oenpelli in Arnhem Land, were a fairly late introduction into the material culture of the Aborigines.

Although the area was very thoroughly searched, no examples were found of two leading categories of stone artifacts, viz. ground edge axes and microliths. However, one axe was found by a local collector. The area is just beyond the western limit of distribution of

ground edge implements in this part of Australia, but it is well within the general area of distribution of microliths and there is no apparent reason for their absence.

### Reference

- MACKAY, D., 1946. The prehistory of Flinders Island. *Present Opinion, Melbourne University Arts Association* 2: 48-50.

### Explanation of Plate 29

All  $\times 1/2$ .

- Fig. 1—Elliptical artifact, Talgarry Station, Lake Victoria, N.S.W.  
Fig. 2—Emu-egg stone, Nulla Station, Lake Victoria, N.S.W.  
Fig. 3—Emu-egg stone, Albermarle Station, 60 m. E. of Menindee, N.S.W.